

**Calendar No. 445**108<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION**S. 1516****[Report No. 108-235]**

To further the purposes of the Reclamation Projects Authorization and Adjustment Act of 1992 by directing the Secretary of the Interior, acting through the Commissioner of Reclamation, to carry out an assessment and demonstration program to assess potential increases in water availability for Bureau of Reclamation projects and other uses through control of salt cedar and Russian olive.

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**IN THE SENATE OF THE UNITED STATES**

JULY 31 (legislative day, JULY 21), 2003

Mr. DOMENICI (for himself, Mr. CAMPBELL, Mr. BINGAMAN, Mr. BAUCUS, Mr. BURNS, and Mr. ALLARD) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

MARCH 9, 2004

Reported by Mr. DOMENICI, with an amendment and an amendment to the title

[Strike out all after the enacting clause and insert the part printed in *italic*]

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**A BILL**

To further the purposes of the Reclamation Projects Authorization and Adjustment Act of 1992 by directing the Secretary of the Interior, acting through the Commissioner of Reclamation, to carry out an assessment and demonstration program to assess potential increases in

water availability for Bureau of Reclamation projects and other uses through control of salt cedar and Russian olive.

1        *Be it enacted by the Senate and House of Representa-*  
 2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4        This Act may be cited as the “Salt Cedar Control  
 5 Demonstration Act”.

6 **SEC. 2. FINDINGS.**

7        Congress finds that—

8            (1) the western United States is currently experi-  
 9            encing its worst drought in modern history;

10           (2) it is estimated that throughout the western  
 11           United States salt cedar and Russian olive—

12                    (A) occupy between 1,000,000 and  
 13                    1,500,000 acres of land; and

14                    (B) are non-beneficial users of 2,000,000  
 15                    to 4,500,000 acre-feet of water per year;

16            (3) the quantity of non-beneficial use of water  
 17            by salt cedar and Russian olive is greater than the  
 18            quantity that valuable native vegetation would use;

19            (4) much of the salt cedar and Russian olive in-  
 20            festation is located on Bureau of Land Management  
 21            land or other land of the Department of the Interior;  
 22            and

1           (5) as drought conditions and legal require-  
 2           ments relating to water supply accelerate water  
 3           shortages, innovative approaches are needed to ad-  
 4           dress the increasing demand for a diminishing water  
 5           supply.

6 **SEC. 3. SALT CEDAR AND RUSSIAN OLIVE ASSESSMENT**  
 7                                   **AND DEMONSTRATION PROGRAM.**

8           (a) **ESTABLISHMENT.**—In furtherance of the pur-  
 9           poses of the Reclamation Projects Authorization and Ad-  
 10          justment Act of 1992 (106 Stat. 4600), the Secretary of  
 11          the Interior, acting through the Commissioner of Ree-  
 12          lamation (referred to in this Act as the “Secretary”), shall  
 13          carry out a salt cedar and Russian olive assessment and  
 14          demonstration program to—

15                 (1) assess the extent of the infestation of salt  
 16                 cedar and Russian olive in the western United  
 17                 States; and

18                 (2) develop strategic solutions for long-term  
 19                 management of salt cedar and Russian olive.

20          (b) **ASSESSMENT.**—Not later than 1 year after the  
 21          date on which funds are made available to carry out this  
 22          Act, the Secretary shall complete an assessment of the ex-  
 23          tent of salt cedar and Russian olive infestation in the west-  
 24          ern United States. The assessment shall—

1           (1) consider past and ongoing research on test-  
2 ed and innovative methods to control salt cedar and  
3 Russian olive;

4           (2) consider the feasibility of reducing water  
5 consumption;

6           (3) consider methods of and challenges associ-  
7 ated with the restoration of infested land;

8           (4) estimate the costs of destruction of salt  
9 cedar and Russian olive, biomass removal, and res-  
10 toration and maintenance of the infested land; and

11           (5) identify long-term management and funding  
12 strategies that could be implemented by Federal,  
13 State, and private land managers.

14       (e) DEMONSTRATION PROJECTS.—The Secretary  
15 shall carry out not less than 5 projects to demonstrate  
16 and evaluate the most effective methods of controlling salt  
17 cedar and Russian olive. Projects carried out under this  
18 subsection shall—

19           (1) monitor and document any water savings  
20 from the control of salt cedar and Russian olive;

21           (2) identify the quantity of, and rates at which,  
22 any water savings under paragraph (1) return to  
23 surface water supplies;

24           (3) assess the best approach to and tools for  
25 implementing available control methods;

1           (4) assess all costs and benefits associated with  
2 control methods and the restoration and maintenance of land;  
3

4           (5) determine conditions under which removal  
5 of biomass is appropriate and the optimal methods  
6 for its disposal or use;

7           (6) define appropriate final vegetative states  
8 and optimal revegetation methods; and

9           (7) identify methods for preventing the re-  
10 growth and reintroduction of salt cedar and Russian  
11 olive.

12       (d) CONTROL METHODS.—The demonstration  
13 projects carried out under subsection (c) may implement  
14 1 or more control method per project, but to assess the  
15 full range of control mechanisms—

16           (1) at least 1 project shall use airborne applica-  
17 tion of herbicides;

18           (2) at least 1 project shall use mechanical re-  
19 moval; and

20           (3) at least 1 project shall use biocontrol meth-  
21 ods such as goats or insects.

22       (e) IMPLEMENTATION.—A demonstration project  
23 shall be carried out during a time period and to a scale  
24 designed to meet the requirements of subsection (c).

25       (f) COSTS.—

1           (1) ~~IN GENERAL.~~—Each demonstration project  
2 under subsection (e) shall be carried out at a cost  
3 of not more than \$7,000,000, including costs of  
4 planning, design, implementation, maintenance, and  
5 monitoring.

6           (2) ~~COST-SHARING.~~—

7           (A) ~~FEDERAL SHARE.~~—The Federal share  
8 of the costs of a demonstration project shall not  
9 exceed 75 percent.

10          (B) ~~FORM OF NON-FEDERAL SHARE.~~—The  
11 non-Federal share of the costs of a demonstra-  
12 tion project may be provided in the form of in-  
13 kind contributions, including services provided  
14 by a State agency.

15          (g) ~~COOPERATION.~~—In carrying out the program, the  
16 Secretary shall—

17           (1) use the expertise of Federal agencies, na-  
18 tional laboratories, Indian tribes, institutions of  
19 higher education, State agencies, and soil and water  
20 conservation districts that are actively conducting  
21 research on or implementing salt cedar and Russian  
22 olive control activities; and

23           (2) cooperate with other Federal agencies and  
24 affected States, local units of government, and In-  
25 dian tribes.

1 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

2 There are authorized to be appropriated to carry out  
3 this Act—

4 (1) \$50,000,000 for fiscal year 2004; and

5 (2) such sums as are necessary for each fiscal  
6 year thereafter.

7 **SECTION 1. SHORT TITLE.**

8 *This Act may be cited as the “Salt Cedar and Russian*  
9 *Olive Control Demonstration Act”.*

10 **SEC. 2. SALT CEDAR AND RUSSIAN OLIVE CONTROL DEM-**  
11 **ONSTRATION PROGRAM.**

12 (a) *ESTABLISHMENT.*—*The Secretary of the Interior*  
13 *(referred to in this Act as the “Secretary”), acting through*  
14 *the Commissioner of Reclamation and in cooperation with*  
15 *the Secretary of Agriculture and the Secretary of Defense,*  
16 *shall carry out a salt cedar (*Tamarix* spp) and Russian*  
17 *olive (*Elaeagnus angustifolia*) assessment and demonstra-*  
18 *tion program—*

19 (1) *to assess the extent of the infestation by salt*  
20 *cedar and Russian olive trees in the western United*  
21 *States;*

22 (2) *to demonstrate strategic solutions for—*

23 (A) *the long-term management of salt cedar*  
24 *and Russian olive trees; and*

25 (B) *the reestablishment of native vegetation;*

26 *and*

1           (3) *to assess economic means to dispose of bio-*  
2 *mass created as a result of removal of salt cedar and*  
3 *Russian olive trees.*

4           **(b) ASSESSMENT.—**

5           (1) *IN GENERAL.—Not later than 1 year after*  
6 *the date on which funds are made available to carry*  
7 *out this Act, the Secretary shall complete an assess-*  
8 *ment of the extent of salt cedar and Russian olive in-*  
9 *festation on public and private land in the western*  
10 *United States.*

11           (2) *REQUIREMENTS.—In addition to describing*  
12 *the acreage of and severity of infestation by salt cedar*  
13 *and Russian olive trees in the western United States,*  
14 *the assessment shall—*

15                   (A) *consider existing research on methods to*  
16 *control salt cedar and Russian olive trees;*

17                   (B) *consider the feasibility of reducing*  
18 *water consumption by salt cedar and Russian*  
19 *olive trees;*

20                   (C) *consider methods of and challenges asso-*  
21 *ciated with the revegetation or restoration of in-*  
22 *festated land; and*

23                   (D) *estimate the costs of destruction of salt*  
24 *cedar and Russian olive trees, related biomass*

1           *removal, and revegetation or restoration and*  
2           *maintenance of the infested land.*

3           *(c) LONG-TERM MANAGEMENT STRATEGIES.—*

4           *(1) IN GENERAL.—The Secretary shall identify*  
5           *and document long-term management and funding*  
6           *strategies that—*

7                   *(A) could be implemented by Federal, State,*  
8                   *and private land managers in addressing infes-*  
9                   *tation by salt cedar and Russian olive trees; and*

10                   *(B) should be tested as components of dem-*  
11                   *onstration projects under subsection (d).*

12           *(2) GRANTS.—The Secretary shall provide grants*  
13           *to institutions of higher education to develop public*  
14           *policy expertise in, and assist in developing a long-*  
15           *term strategy to address, infestation by salt cedar and*  
16           *Russian olive trees.*

17           *(d) DEMONSTRATION PROJECTS.—*

18           *(1) IN GENERAL.—Not later than 180 days after*  
19           *the date on which funds are made available to carry*  
20           *out this Act, the Secretary shall establish a program*  
21           *that selects and funds not less than 5 projects pro-*  
22           *posed by and implemented in collaboration with Fed-*  
23           *eral agencies, units of State and local government,*  
24           *national laboratories, Indian tribes, institutions of*  
25           *higher education, individuals, organizations, or soil*

1        *and water conservation districts to demonstrate and*  
2        *evaluate the most effective methods of controlling salt*  
3        *cedar and Russian olive trees.*

4            (2) *PROJECT REQUIREMENTS.—The demonstra-*  
5        *tion projects under paragraph (1) shall—*

6            (A) *be carried out over a time period and*  
7        *to a scale designed to fully assess long-term man-*  
8        *agement strategies;*

9            (B) *implement salt cedar or Russian olive*  
10       *tree control using 1 or more methods for each*  
11       *project in order to assess the full range of control*  
12       *methods, including—*

13            (i) *airborne application of herbicides;*

14            (ii) *mechanical removal; and*

15            (iii) *biocontrol methods, such as the*  
16       *use of goats or insects;*

17            (C) *individually or in conjunction with*  
18       *other demonstration projects, assess the effects of*  
19       *and obstacles to combining multiple control*  
20       *methods and determine optimal combinations of*  
21       *control methods;*

22            (D) *assess soil conditions resulting from salt*  
23       *cedar and Russian olive tree infestation and*  
24       *means to revitalize soils;*

1           (E) define and implement appropriate final  
2 vegetative states and optimal revegetation meth-  
3 ods, with preference for self-maintaining vegeta-  
4 tive states and native vegetation, and taking into  
5 consideration downstream impacts, wildfire po-  
6 tential, and water savings;

7           (F) identify methods for preventing the re-  
8 growth and reintroduction of salt cedar and Rus-  
9 sian olive trees;

10          (G) monitor and document any water sav-  
11 ings from the control of salt cedar and Russian  
12 olive trees, including impacts to both ground-  
13 water and surface water;

14          (H) assess wildfire activity and manage-  
15 ment strategies;

16          (I) assess changes in wildlife habitat;

17          (J) determine conditions under which re-  
18 moval of biomass is appropriate (including opti-  
19 mal methods for the disposal or use of biomass);  
20 and

21          (K) assess economic and other impacts asso-  
22 ciated with control methods and the restoration  
23 and maintenance of land.

24       (e) *DISPOSITION OF BIOMASS.*—

1           (1) *IN GENERAL.*—Not later than 1 year after  
2           the date on which funds are made available to carry  
3           out this Act, the Secretary, in cooperation with the  
4           Secretary of Agriculture, shall complete an analysis of  
5           economic means to use or dispose of biomass created  
6           as a result of removal of salt cedar and Russian olive  
7           trees.

8           (2) *REQUIREMENTS.*—The analysis shall—

9                   (A) determine conditions under which re-  
10                  moval of biomass is economically viable;

11                  (B) consider and build upon existing re-  
12                  search by the Department of Agriculture and  
13                  other agencies on beneficial uses of salt cedar  
14                  and Russian olive tree fiber; and

15                  (C) consider economic development opportu-  
16                  nities, including manufacture of wood products  
17                  using biomass resulting from demonstration  
18                  projects under subsection (d) as a means of de-  
19                  fraying costs of control.

20          (f) *COSTS.*—

21                  (1) *IN GENERAL.*—With respect to projects and  
22                  activities carried out under this Act—

23                          (A) the assessment under subsection (b)  
24                          shall be carried out at a cost of not more than  
25                          \$4,000,000;

1           (B) the identification and documentation of  
2 long-term management strategies under sub-  
3 section (c) shall be carried out at a cost of not  
4 more than \$2,000,000;

5           (C) each demonstration project under sub-  
6 section (d) shall be carried out at a Federal cost  
7 of not more than \$7,000,000 (including costs of  
8 planning, design, implementation, maintenance,  
9 and monitoring); and

10           (D) the analysis under subsection (e) shall  
11 be carried out at a cost of not more than  
12 \$3,000,000.

13 (2) *COST-SHARING.*—

14           (A) *IN GENERAL.*—The assessment under  
15 subsection (b), the identification and documenta-  
16 tion of long-term management strategies under  
17 subsection (c), a demonstration project or por-  
18 tion of a demonstration project under subsection  
19 (d) that is carried out on Federal land, and the  
20 analysis under subsection (e) shall be carried out  
21 at full Federal expense.

22           (B) *DEMONSTRATION PROJECTS CARRIED*  
23 *OUT ON NON-FEDERAL LAND.*—

24           (i) *IN GENERAL.*—The Federal share of  
25 the costs of any demonstration project fund-

1                    *ed under subsection (d) that is not carried*  
2                    *out on Federal land shall not exceed—*

3                    *(I) 75 percent for each of the first*  
4                    *5 years of the demonstration project;*  
5                    *and*

6                    *(II) for the purpose of long-term*  
7                    *monitoring, 100 percent for each of*  
8                    *such 5-year extensions as the Secretary*  
9                    *may grant.*

10                  *(ii) FORM OF NON-FEDERAL SHARE.—*  
11                  *The non-Federal share of the costs of a dem-*  
12                  *onstration project that is not carried out on*  
13                  *Federal land may be provided in the form*  
14                  *of in-kind contributions, including services*  
15                  *provided by a State agency or any other*  
16                  *public or private partner.*

17                  *(g) COOPERATION.—In carrying out the assessment*  
18                  *under subsection (b), the demonstration projects under sub-*  
19                  *section (d), and the analysis under subsection (e), the Sec-*  
20                  *retary shall cooperate with and use the expertise of Federal*  
21                  *agencies and the other entities specified in subsection (d)(1)*  
22                  *that are actively conducting research on or implementing*  
23                  *salt cedar and Russian olive tree control activities.*

24                  *(h) INDEPENDENT REVIEW.—The Secretary shall sub-*  
25                  *ject to independent review—*

- 1           (1) *the assessment under subsection (b);*  
 2           (2) *the identification and documentation of long-*  
 3 *term management strategies under subsection (c);*  
 4           (3) *the demonstration projects under subsection*  
 5 *(d); and*  
 6           (4) *the analysis under subsection (e).*

7           (i) *REPORTING.—*

8           (1) *IN GENERAL.—The Secretary shall submit to*  
 9 *Congress an annual report that describes the results*  
 10 *of carrying out this Act, including a synopsis of any*  
 11 *independent review under subsection (h) and details*  
 12 *of the manner and purposes for which funds are ex-*  
 13 *pended.*

14           (2) *PUBLIC ACCESS.—The Secretary shall facili-*  
 15 *tate public access to all information that results from*  
 16 *carrying out this Act.*

17           (j) *AUTHORIZATION OF APPROPRIATIONS.—There are*  
 18 *authorized to be appropriated to carry out this Act—*

- 19           (1) *\$20,000,000 for fiscal year 2005; and*  
 20           (2) *\$15,000,000 for each subsequent fiscal year.*

Amend the title so as to read: “A bill to further the purposes of the Reclamation Projects Authorization and Adjustment Act of 1992 by directing the Secretary of the Interior, acting through the Commissioner of Reclamation, to carry out an assessment and demonstration program to control salt cedar and Russian olive, and for other purposes.”.

**Calendar No. 445**

108TH CONGRESS  
2D SESSION

**S 1516**

**[Report No. 108-235]**

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**AN ACT**

To further the purposes of the Reclamation Projects Authorization and Adjustment Act of 1992 by directing the Secretary of the Interior, acting through the Commissioner of Reclamation, to carry out an assessment and demonstration program to assess potential increases in water availability for Bureau of Reclamation projects and other uses through control of salt cedar and Russian olive.

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MARCH 9, 2004

Reported with an amendment and an amendment to the  
title